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10/505,332	08/23/2004	Atsushi Hatabu	18133	3772

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EXAMINER

HOLDER, ANNER N

ART UNIT	PAPER NUMBER
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2609

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05/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/505,332

Applicant(s)

HATABU ET AL.

Examiner

Anner Holder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/23/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1-30 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-38 of copending Application No. 10/505668. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

1. Claims 1-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. (Ono) US 6,314,137 B1 in view of Fallon et al. (Fallon) US 2002/0080871 A1 and Veltman US 5,481,543 further in view of Kuriacose et al. (Kuriacose) US 5,111,292.

As to claim 1, Ono teaches a moving picture transmission system comprising a transmission side sending encoded moving picture data [Abstract; Col. 2 Lines 64-67] and one or plural reception sides decoding the encoded moving picture data, [Abstract; Fig. 15] wherein said transmission side compresses input moving picture frames into a plurality of encoded data. [Abstract; Fig. 15; Col. 2 Lines 64-67]

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Ono does not specifically teach compression into a plurality of encoded data at multiple compression ratios, frame-by-frame selection from the plurality of encoded data received by the reception side without error and decodes the selected encoded data.

Fallon teaches using plurality of different encoders and decoders [Pg. 6 ¶ 0078; Pg. 7 0084; Pg 8 ¶ 0090, 0091; Figs. 5-6, selectively combining compressed stat blocks, Pg. 6 ¶ 0078; Pg. 8 ¶ 0088]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Ono's teaching of compressing video data through interframe predictive coding with the encoding and decoding device of Fallon to allow an increase in encoding and decoding of data streams.

Ono modified by Fallon does not specifically teach multiple compression ratios.

Veltman teaches fame multiple compression ratios. [Col. 4 Lines 59-62; Col. 5 Lines 3-5; Abstract]

It would have been obvious to one of ordinary skill in the art to incorporate Veltman teaching of varying compression ratios with Ono and Fallon modified device to improve the compression and decompression of data.

Ono modified by Fallon and Veltman does not specifically teach frame-by-frame selection.

Kuriacose teaches frame-by-frame selection from the plurality of encoded data received by the reception side without error and decodes the selected encoded data. [Figs. 1-1C; Col. 7 Lines 37-42]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kuriacose teaching of frame-by-frame selection of data with the device of Ono modified by the teachings of Veltman and Fallon to allow for the system to structure data by priority settings and improve image quality.

2. As to claim 6, refer to statements made in rejection of claim 1 above, except claim 6 refers to packets instead of frames.

3. As to claim 2, Ono (modified by Fallon, Veltman and Kuriacose) teaches transmission side compresses input moving picture frames into a plurality of encoded data at multiple compression ratios and assigns a priority order to each data of said encoded data subject to a predetermined assignment rule, and sends said plurality of encoded data; [Abstract; Fig. 1] and each one of said reception sides selects the encoded data having the highest priority order with frame-by-frame selection from the plurality of encoded data received by the reception side without error and decodes the selected encoded data. [Figs. 1-1C; Col. 7 Lines 37-42]

4. As to claim 7, refer to statements made in rejection of claim 2 above, except claim 7 refers to packets instead of frames.

5. As to claim 3, Ono (modified by Fallon, Veltman and Kuriacose) teaches transmission side sends, as said plurality of encoded data comprising primary encoded data produced by compressing the input moving picture frames using interframe prediction, [Ono - Abstract; Col. 3 Lines 5-7; Col. 19 Lines 42-43] and encoded data produced by compressing the input moving picture frames at one or plural compression ratios which are higher than said primary encoded data, [Fallon - Fig. 5; Veltman - Fig. 8B] using interframe prediction referring to frames [Ono - Abstract; Col. 2 Lines 64-67] positioned at the same time as the reference frames [Veltman - Fig.

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5D] referred to in the interframe prediction of said primary encoded data. [Ono – Abstract; Col. 2 Lines 64-67]

6. As to claim 8, refer to statements made in rejection of claim 3 above, except claim 8 refers to packets instead of frames.

7. As to claim 17, refer to statements made in rejection of claim 3 above, except claim 17 refers to encoding apparatus instead of a transmission system.

8. As to claim 19, refer to statements made in rejection of claim 3 above, except claim 19 refers to encoding apparatus instead of a transmission system.

9. As to claim 4, Ono (modified by Fallon and Veltman) teaches transmission side sends a plurality of encoded data comprising all compression-encoded data or encoded data of selected frames. [Ono - Fig. 15; Fallon - Fig. 5-6]

10. As to claim 9, refer to statements made in rejection of claim 4 above, except claim 9 refers to packets instead of frames.

11. As to claim 18, refer to statements made in rejection of claim 4 above, except claim 18 refers to encoding apparatus instead of a transmission system.

12. As to claim 20, refer to statements made in rejection of claim 4 above, except claim 20 refers to encoding apparatus instead of a transmission system.

13. As to claim 5, Ono (modified by Fallon, Veltman, and Kuriacose) teaches reception side selects the encoded data having the lowest compression ratio and decodes the selected encoded data. [Kuriacose – Abstract; Fig. 1 – it is obvious that either the high or low priority can be selected depending upon programming]

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14. As to claim 10, refer to statements made in rejection of claim 5 above, except claim 10 refers to packets instead of frames.

15. As to claim 11, Ono (modified by Fallon and Veltman) teaches transmission side multiplexes [Ono – Fig. 9 (87)] said plurality of encoded data [Fallon - Fig. 5] with time differences added therebetween [Veltman – Fig. 22A] and sends the multiplexed encoded data, [Fallon - Fig. 5] and each one of said reception sides demultiplexes the multiplexed and sent data into a plurality of encoded data. [Ono – Fig. 21 (96)]

16. As to claim 12, refer to statements made in rejection of claim 11 above, except claim 12 refers to packets instead of frames.

17. As to claim 21, refer to statements made in rejection of claim 11 above, except claim 21 refers to an encoding apparatus instead of a transmission system.

18. As to claim 22, refer to statements made in rejection of claim 11 above, except claim 22 refers to an encoding apparatus instead of a transmission system.

19. As to claim 25, refer to statements made in rejection of claim 11 above, except claim 25 refers to a decoding apparatus instead of a transmission system.

20. As to claim 26, refer to statements made in rejection of claim 11 above, except claim 26 refers to a decoding apparatus instead of a transmission system.

21. As to claim 13, Ono (modified by Fallon, Veltman, and Kuriacose) teaches a moving picture encoding apparatus as said transmission side and one or plural moving picture decoding apparatuses as said reception sides; [Fallon – Fig. 5] said moving picture encoding apparatus having: a plurality of encoding means for compressing input moving picture frames into a plurality of encoded data at multiple compression ratios [Veltman – Abstract] and sending the

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encoded data; [Fallon – Fig. 5] each one of said moving picture decoding apparatuses having: a plurality of encoded-data-receiving means for receiving the plurality of encoded data which have been sent [Fallon – Fig. 6] and detecting bit errors or packet losses of the received encoded data; [Kuriacose – Fig. 1 (15-16) (21-22); Col. 4 Line 66- Col. 5 Line 6] a selecting mean for selecting the encoded data of the lowest compression ratio from the encoded data which have been received free of bit errors or packet losses by said encoded-data-receiving means with frame-by-frame selection; and a decoding mean for decoding the encoded data selected by said selecting mean. [Kuriacose – Abstract; Figs. 1 – 1C, it is obvious that either the high or low priority can be selected depending upon programming]

22. As to claim 14, refer to statements made in rejection of claim 13 above, except claim 14 refers to packets instead of frames.

23. As to claim 15, Ono (modified by Fallon and Veltman) teaches transmission side has delay-adding means for delaying part of said encoded data to add the time differences between [Veltman – Col. 9 Lines 52-55, 63-67] said plurality of encoded data, [Fallon – Fig. 5] and multiplexing means for multiplexing said plurality of encoded data with the time differences added therebetween and sending the multiplexed encoded data, [Veltman – Fig. 22A] and each one of said reception sides has demultiplexing means for demultiplexing the multiplexed and sent data into a plurality of encoded data. [Ono – Fig. 11, it is obvious that the decoder incorporates a demultiplexer]

24. As to claim 16, refer to statements made in rejection of claim 15 above, except claim 16 refers to packets instead of frames.

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25. As to claim 23, A moving picture decoding apparatus for receiving data produced by compressing moving picture data from a moving picture encoding apparatus and decoding the received data, [Fallon - Fig. 5; Fig. 6] wherein the moving picture decoding apparatus receives a plurality of encoded data [Fallon - Fig. 6] comprising primary encoded data produced by compressing input moving picture frames using interframe prediction, [Ono - Abstract; Col. 3 Lines 5-7; Col. 19 Lines 42-43] and encoded data produced by compressing the input moving picture frames at one or plural compression ratios which are higher than said primary encoded data using interframe prediction referring to frames positioned at the same time as the reference frames used in the interframe prediction of said primary encoded data, [Fallon - Fig. 5; Veltman - Fig. 8B; Ono - Abstract; Col. 3 Lines 5-7; Col. 19 Lines 42-43] and selects the encoded data having the lowest compression ratio with frame-by-frame selection from said encoded data free of bit errors or packet losses of the received encoded data, and decodes the selected encoded data. [Kuriacose - Figs. 1-1C]

26. As to claim 24, refer to statements made in rejection of claim 23 above, except claim 24 refers to packets instead of frames.

27. Claims 27, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fallon et al. (Fallon) US 2002/0080871 A1 in view of Veltman US 5,481,543.

As to claim 27, Fallon teaches a moving picture transmission system having a moving picture transmission program for enabling a computer processor to encode moving picture data and send encoded data at a transmission side, [Fig. 2; Fig. 5] and enabling a computer processor to receive and decode the encoded data at reception sides, wherein said moving picture transmission program enables the computer processor at the transmission side to compress input

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moving picture frames into a plurality of encoded data [Pg 3 ¶ 004-0045; Fig. 5] and sends the encoded data, and enables the computer processor at said reception side to select any one encoded data with frame-by-frame selection from the plurality of properly received encoded data and decode the selected encoded data. [Fallon – Pg 3 ¶ 004-0045, 0047]

Fallon does not specifically teach multiple compression ratios.

Veltman teaches multiple compression ratios. [Veltman – Abstract]

It would have been obvious to one of ordinary skill in the art to incorporate Veltman's teaching of multiple compression ratios with the coding device of Fallon allowing improvements in the compression and decompression of data.

28. As to claim 29, refer to statements made in rejection of claim 27 above, except claim 29 refers to packets instead of frames.

29. Claims 28, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over of Fallon et al. (Fallon) US 2002/0080871 A1 in view of Veltman US 5,481,543 as applied to claims 27, 29 above, further in view of Kuriacose et al. (Kuriacose) US 5,111,292.

As to claim 28, Fallon (modified by Veltman) teaches the limitations of claim 27 above.

Fallon (modified by Veltman) does not specifically teach the selection of the encoded data having the lowest compression ratio with frame-by-frame selection from the plurality of properly received encoded data and decode the selected encoded data.

Kuriacose teaches moving picture transmission program enables the computer processor at said reception side to select the encoded data having the lowest compression ratio with frame-by-frame selection from the plurality of properly received encoded data and decode the selected encoded data. [Kuriacose – Abstract; Fig. 1; Col. 7 Lines 37-43]

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30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kuriacose of selecting encoded data at an compression ratio and decode selected data with the device of Fallon modified by Veltman teachings to improve the image quality.

31. As to claim 30, refer to statements made in rejection of claim 28 above, except claim 30 refers to packets instead of frames.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anner Holder whose telephone number is 571-270-1549. The examiner can normally be reached on M-Th, M-F 8 am - 3 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANH 04/25/07


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SUPERVISORY PATENT EXAMINER